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Application Serial No. 10/727,195

HUIP-P02-032

AMENDMENTS TO THE CLAIMS

1. **(Previously presented)** A method of screening for an agent for inhibiting or reducing the proliferation or growth of lung cancer cells, comprising contacting lung cancer cells with an amount of an agent, wherein the agent is a small organic molecule, and determining, as compared to a control, whether the agent inhibits or attenuates hedgehog signaling and determining, as compared to a control, whether the agent inhibits or reduces cell proliferation or growth, wherein if the agent inhibits or attenuates the hedgehog signaling and inhibits or reduces cell proliferation or growth relative to the control, then an agent that inhibits or reduces the proliferation or growth of lung cancer cells is identified.

2. **(Cancelled)**

3. **(Previously presented)** The method of claim 1, wherein the lung cancer cells are in culture.

4. **(Previously presented)** The method of claim 1, wherein the cells are in an animal.

5-24. **(Cancelled)**

25. **(Previously presented)** The method of claim 1, wherein the lung cancer cells are small cell lung cancer (SCLC) cells or non-small cell lung cancer (NSCLC) cells.

26. **(Previously presented)** The method of claim 1, wherein the lung cancer cells are adenocarcinoma cells, lung cell carcinoma cells, or squamous cell carcinoma cells.

27. **(Currently amended)** An *in vitro* method of screening for an agent for inhibiting or reducing the proliferation or growth of cells, comprising contacting lung cells provided in culture, which lung cells are not lung cancer cells and which lung cells are not present in the culture as part of a tissue or organ, with an amount of an agent, and determining, as compared to a control, whether the agent inhibits or attenuates hedgehog signaling and whether the agent

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inhibits or reduces cell proliferation or growth, wherein if the agent inhibits or attenuates the hedgehog signaling and inhibits or reduces cell proliferation or growth relative to the control, then an agent that inhibits or reduces the proliferation or growth of said lung cells is identified.

28. **(Previously presented)** The method of claim 27, wherein the agent is a small organic molecule.

29. **(Currently amended)** The method of claim 1, wherein the agent ~~disrupts the association of patched with smoothened~~ interacts with a protein other than patched.

30. **(Currently amended)** The method of claim 27, wherein the agent ~~disrupts the association of patched with smoothened~~ interacts with a protein other than patched.

31. **(Currently amended)** The method of claim 28, wherein the agent ~~disrupts the association of patched with smoothened~~ interacts with a protein other than patched.

32. **(New)** A method of screening for an agent for inhibiting or reducing the proliferation or growth of lung cancer cells, comprising contacting lung cancer cells, which lung cancer cells are not squamous cell carcinoma cells, with an amount of an agent, wherein the agent is a small organic molecule, and determining, as compared to a control, whether the agent inhibits or attenuates hedgehog signaling and determining, as compared to a control, whether the agent inhibits or reduces cell proliferation or growth, wherein if the agent inhibits or attenuates the hedgehog signaling and inhibits or reduces cell proliferation or growth relative to the control, then an agent that inhibits or reduces the proliferation or growth of lung cancer cells is identified.

33. **(New)** The method of claim 32, wherein the lung cancer cells are in culture.

34. **(New)** The method of claim 32, wherein the lung cancer cells are in an animal.

35. **(New)** The method of claim 32, wherein the agent interacts with a protein other than patched.